IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1.   (currently amended)A multiplexing apparatus comprising:

a plurality of terminal interface units, each accommodating a line on a terminal side;

a priority control sub-unit buffer-unit-which is connected to each of connects said terminal interface units by the point-to-point connection; and

a network interface unit connected to said priority control sub-unitbuffer-unit, the network interface unit accommodating a line on a network side,

wherein each of said terminal interface units converts data received from the line on the terminal side to a data block (hereinafter generically called packet type data) as a certain unit, such as a cell and a packet, which is determined by a protocol adopted in said network, and transmits the packet type data to the buffer priority control sub-unit; and,

wherein each of said terminal interface units disassembles packet type data received from the buffer unitpriority control sub-unit, and extracts data, to transmit the data onto the corresponding line on said terminal side,

wherein said priority control sub-unit, buffer unit has including a plurality of packet type data storing unit-units in corresponding relationships to said terminal interface units for storing the packet type data received from a plurality of said terminal interface units, reads out the packet type data sequentially in a

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predetermined order from the plurality of packet type data storing unit units to transmit the packet type data to said network interface unit; and, stores in the packet type data storing unit in conformity with a destination of the packet type data received from said network interface unit, and transmits the packet type data to the terminal interface unit in conformity with the destination of the packet type data being received selects one of said terminal interface units in conformity with a destination of the packet type data received from said network interface unit to transmit the packet type data to the terminal interface unit, and

wherein said network interface unit synchronizes the packet type data received from said buffer priority control sub-unit with the line on said network side to transmit the synchronized packet type data to the line on said network side, and transmits the packet type data received from the line on said network side to said priority control sub-unit buffer unit.

2.   (currently amended)The multiplexing apparatus according to claim 1, wherein a transmission speed of the packet type data between said priority control sub-unit buffer unit and said network interface unit is coincident with a transmission speed of the line on said network side.

Claim 3 (canceled).

4.   (currently amended)The multiplexing apparatus according to claim 1, wherein said packet type data storing unit has buffers, each being prepared for the

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~~corresponding one of said terminal interface units, and each of said buffers~~ is directly connected to the corresponding terminal interface unit by the point-to-point connection.

5. (original) The multiplexing apparatus according to claim 1, wherein the line on said network side is an ATM (Asynchronous Transfer Mode) line, and said packet type data is an ATM cell.

6. (original) The multiplexing apparatus according to claim 1, wherein the line on said network side is an IP (Internet Protocol) line, and said packet type data is an IP packet.